REMARKS

Paragraph 9 has been amended to add a period at the end of the Paragraph after "(Eqn 5)".

The Examiner objected to the Abstract as having more than 150 words. The Abstract had a total of 163 words. The Abstract has been amended to reduce the number of words, and, as amended, now has 148 words.

The Examiner has objected to Claims 18 and 20-25. Claim 18 has been amended to correct the spelling of the word "dielectric". Claim 20 has been amended to place a period at the end of the Claim. Claim 25 has been amended to change "generated" to "generate". Applicants appreciate the Examiner pointing out these areas needing correction.

The Examiner has rejected Claim 12 under 35 USC 112 as being indefinite in use of the word "silicone." The Examiner says that silicone "is not defined by the claim" and that "the specification does not provide a standard for ascertaining" the scope of the invention when "silicone" is used. However, applicants believe that the scope of the word "silicone" would be ascertainable by one skilled in the art. Claim 12 refers back to Claims 11, 10, 9, and 1. Claim 1 requires that "at least the hot electrodes" are "hermetically sealed across the gas flow portion of the electrodes." Claim 9 requires that the hot electrodes are hermetically sealed with a ceramic material. Claim 10 then specifies that the ceramic material is a borosilicate glass. Claim 11 then further requires that the borosilicate glass is in the form of sheets placed on opposite flat sides of the electrode and the edges of the glass sheets are sealed with an electrically insulating material. Claim 12 then recites that the electrically insulating material is a high voltage silicone sealant. From this series of claims, the "silicone sealant" required by Claim 12 is clearly described as an electrically insulating and sealing material which seals the edges of the glass sheets so that the combination of the glass sheets and silicone material hermetically seal the electrode. It would be clear to a person skilled in the art that any silicone sealant could be used that would hermetically seal the edges of the glass sheets and serve as an insulator for the voltages used between the electrodes. Further,

a person skilled in the art would know which silicones would have these properties and could be used, or would know at least how to easily determine if a particular silicone would have the required properties and work.

The silicone material required for the described embodiment of the invention is also described in the specification to an extent to make the requirements of the silicone sealant clear to a person skilled in the art. Thus, Paragraph 13 of the Specification, in numbered sub paragraph 1, says:

1. The "hot" electrodes are totally enclosed in a high dielectric, chemically resistant and high thermal resistance material, typically a ceramic material, such as borosilicate glass and must be sealed to ensure electrical isolation of the electrically conductive part within the "hot" electrode from the external environment of the ceramic surface and maintain the dielectric barrier. The seal of the "hot" electrodes within the dielectric isolation plates can be either high dielectric strength silicone, or the entire plate can be totally enclosed in a ceramic bonded directly to the conductor (except for the electrical connection to the conductor).

Paragraph 37 says: "The 'hot' electrodes 56 are hermetically sealed by an insulating material such as a borosilicate glass 58, on both sides of the conductor plate 56. A silicone sealing material 59, Figs. 6 and 8, seal all glass edges." Paragraph 39 says : "The hermetic sealing normally incorporates borosilicate glass 58 to cover the internal stainless steel or other conductive material of electrodes 56 on both sides, with high voltage silicone sealant 59 around all glass edges, filling all gaps to provide the sealing of the conductive electrode part 56 within the dielectric."

It is submitted that with the guidance given by the claims, in combination with the disclosure of the specification, that a person skilled in the art would know the requirements and could easily pick out a silicone sealant to use if following the embodiment of the invention using the silicone sealant. Further, such person skilled in the art would know if a particular silicone sealant would fall within the scope of the claims. Any silicone sealant that would seal the glass plates around the electrode and insulate the

plates would be satisfactory and fall within the scope of Claim 12. Applicants submit that amendment of Claim 12 should not be necessary.

Favorable reconsideration is requested.

Respectfully,

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